

fault or joint along its south side, forming an unusual crease at its attachment point with the main mountain mass. The "Whiteside Granite" is apparently quite resistant to erosion that results in this very impressive feature at the edge of the rapidly eroding edge of the Eastern Continental Divide. Previously this formation was called Whiteside Granite (Hadley and Nelson, 1971) or Cashiers Gneiss (McKniff, 1967). These igneous rocks are of Devonian age (390 million years) and are classed as Quartz diorite to granodiorite (NC Geological Survey, 1985).

**Biological Description:** Gaddy (March 12 and 18 1992) and Dellinger (1992) identify 11 community types in the Whiteside Mountain area. The differentiation of the High Elevation Granitic Dome and High Elevation Rocky Summit were not clearly made and are described here together.

1, 2. High Elevation Granitic Dome, High Elevation Rocky Summit: These types are lumped into this description because of their floristic similarity. Some attempt has been made in the plant list to separate species composition and frequency, but this should be considered tentative at best. Woody species on the outcrop include *Pinus strobus*, *Acer rubrum*, and *Tsuga caroliniana* and the largest population of the extremely narrow endemic *Robinia viscosa* var. *hartwegii*. Some herbaceous species commonly encountered are *Selaginella tortipila*, *Krigia montana*, and various grasses. Rarely encountered are *Corydalis sempervirens*, *Scirpus cespitosus*, and *Senecio millefolium* reported for the Wildcat Cliffs. Several of the species found here are considered Pleistocene alpine relicts (Wiser, 1994).

3) Northern Hardwoods Forest: This type occurs over parts of the north slope. The canopy is composed of *Betula Alleghaniensis*, *Quercus rubra*, and *Betula lenta*. *Menziesia pilosa* is a common shrub along with *Vaccinium* spp. and occasionally *Viburnum cassinoides*. Herbs are dense with *Clintonia umbellata*, *Eupatorium steelei*, and *Solidago* spp. frequent.

4) High Elevation Red Oak Forest: Parts of the summit appear to be composed primarily of this type. *Quercus rubra* is dominated with *Betula alleghaniensis* and *B. lenta*. The understory is diverse with *Rubus* cf. *canadensis* common in some areas and *Hamamelis virginiana*, *Amelanchier arborea* var. *laevis* and *Acer pensylvanicum* frequently encountered. Herbs are rather dense and diverse, with *Aster acuminatus*, *Solidago* spp., and *Aralia nudicaulis* frequently seen.

5) Montane Oak-Hickory Forest: This type occurs on the lower slopes and was not well surveyed in this study. Some areas seen contained *Quercus rubra*, *Q. montana*, *Q. alba*, and occasionally *Q. coccinea*. This type is segregated in parts as Chestnut Oak Forest in which Gaddy notes its extensive presence on ridges and lower slopes grading into cove forest.

6) Acidic Cove Forest: A large area of this type occurs in Whiteside Cove and was visited briefly in this study. Other examples probably occur on much of the lower slopes. The area seen has a canopy dominated by *Tsuga canadensis* and a mix of deciduous species including *Liriodendron tulipifera*, *Betula lenta*, *Magnolia fraseri*, and *Quercus rubra*. The understory is dominated by tall, rather widely spaced *Rhododendron maximum*. Herbs are sparse with *Mitchella repens*, *Iris verna*, and *Trillium erectum* frequent.

7) Low Elevation Granitic Dome: This type occurs on the lower slopes of Whiteside Cove. The outcrop is very smooth and gently sloping with *Acer rubrum*, *Pinus virginiana*, *Sassafras albidum*, and *Juniperus virginiana* frequent woody species. The rather uncommon oak hybrid *Quercus X saulii* was found here. Shrubs consisted mainly of heaths, primarily *Kalmia latifolia*. Herbs encountered included *Crotonopsis elliptica*, *Danthonia* sp., *Hypericum gentianoides*, *Selaginella tortipila*, and *Polygonatum biflorum*. Several uncommon or rare species occur, including